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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,671	09/02/2003	Lee A. Shaw	LITHO-009C	4629

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EXAMINER	
ADDIE, RAYMOND W	

ART UNIT	PAPER NUMBER
3671	

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/653,671	SHAW ET AL.	
	Examiner	Art Unit	
	Raymond W. Addie	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *01/20/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not provide for the use of a power trowel after applying a surface retarder.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 40 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for using a power trowel **before** applying a surface retarder, does not reasonably provide enablement for using a power trowel **after** applying a surface retarder. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Although Applicant relies on incorporating by reference the teachings of Shaw et al. # 6,033,146 for disclosing the use of a power trowel after applying a surface retarder, the prior art cited only provides for the use of a power trowel, **before a surface retarder is applied to the concrete surface**. Further, paragraph 39 of the instant application, as argued by Applicant, is silent with respect to the use of a power trowel.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 11, 13, 15-32, 35, 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaw et al. # 6,033,146.

Shaw et al. discloses a method of producing surface seeded, exposed particulate, concrete; having a generally flat, exposed particulate surface suitable for pedestrian traffic. Said method comprising:

Preparing a subgrade (10) to a desired grade.

Pouring a concrete mixture (16) over the subgrade.

Screeding the concrete mixture (16) to a desired grade and forming a top surface.

Finishing the top surface of the concrete mixture with a magnesium bull-float to seal the top surface by disposing a quantity of cement/fines. See col. 3, lns. 25-60.

Uniformly spraying a quantity of particulate material (18), such as Monterey Aquarium coarse sand, upon the top surface of the cement/fines, in the amount of 1 lb/sq ft.

Mixing the quantity of particulate (18) into the cement/fines formed on the upper surface of the concrete mixture (16). See Col. 4, lns. 19-25.

Applying a surface retarder (unnumbered) uniformly over the exposed surface of the particulate (18) and the cement/fines.

Washing surface films from the exposed surface. See col. 4, lns. 31-54.

Curing the concrete mixture (16) to form a cured mixture and a cured paste.

Power washing the exposed surface. See col. 4, lns. 55-60.

In regards to Claims 2-5, 11 Shaw et al. '146 discloses it is desirable, after the washing step, to provide a lithium based, quartz sealer, which is react able with a hydrolyzed alkali silica; to the top surface (16) of the concrete surface. Said top surface (16) of said surface seeded concrete being no more than, and preferably less than $3/8^{th}$ inch thick, Shaw et al. '146 further discloses permitting the sealer to penetrate the top layer of the concrete mass to a depth of approximately $1/8^{th}$ inch, whereby a reaction between the top layer (18) and the quartz sealer, causes the formation of an insoluble silicate structure, which acts as a protective barrier, reducing water permeability

In regards to Claims 6-9 Shaw et al. discloses the particulate material (18) can be glass, seashells.

In regards to claims 13, 15, 16 Shaw et al. discloses the steps of uniformly applying the particulate matter (18) to the surface (16) at a rate of approximately $1bs/1ft^2$. As well as applying the surface retarder so as to penetrate the surface (16) to a depth of at least $1/8^{th}$". See col. 4, lns. 5-36.

In regards to Claims 17, 18 Shaw et al. discloses the method steps of: using a float, as well as a sponge, in a circular motion to cover and distribute, the particulate with the cement/fines concrete paste. See col. 4, lns. 17-26.

In regards to Claims 19-21 Shaw et al. discloses the method steps of: Applying water to the upper surface of the concrete mixture, to wash said mixture, lightly brushing the upper surface of the concrete mixture, such that no more than 5% of particulate (18) is removed. Said washing of the upper surface of the concrete mixture to remove surface residue, comprises: Washing the upper surface of the concrete with a mixture of water and muratic acid. See col. 4, lns. 45-60.

In regards to Claims 22-25 Shaw et al. discloses between applying of the surface retarder and said washing surface film, the method further comprises: covering the upper surface of the concrete mixture with a vapor barrier for 4-24 hrs, curing comprises curing the concrete mixture using a fogger or soaker hose, col. 4, lns. 35-53.

In regards to Claims 26-28 Shaw et al. discloses placing reinforcement means, such as rebar, upon the subgrade to be disposed within the poured concrete mixture. as well as mixing a color additive to the concrete mix.

Further, Shaw et al. discloses that after the concrete mixture has cured, it is desirable to increase the surface roughness of the concrete by sandblasting, acid etching or grinding and polishing. See col. 4, lns. 55-64.

In regards to Claims 29-32 Shaw et al. discloses the particulate material is washed and air-dried before being sprayed onto the concrete surface. Col. 4, lns. 5-10. The subgrade is compacted to approximately 90%, before receiving a layer of fill sand (12), in order to form a surface seeded exposed particulate concrete structure.

In regards to claims 35, 41 Shaw et al. discloses a method of producing a surface seeded exposed aggregate concrete upon a subgrade comprising the steps of:
Pouring a concrete mixture (16) over a subgrade (not numbered, see col. 3).
Finishing the exposed surface of the concrete mixture with a bull float.
Spreading aggregate (18) upon the exposed surface of the concrete mixture.
Mixing the quantity of aggregate with a quantity of cement/fines paste via a bull float.
Finishing the exposed surface of the concrete mixture with a float or a power trowel.
Applying a surface retarder to the exposed surface of the concrete mixture.
Finishing the exposed surface of the concrete mixture (16), with a soft broom, after application of said surface retarder. See Col. 3, ln. 42-col. 4, ln. 47.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. # 6,033,146 in view of Shaw et al. # 6,016,635.

Shaw et al. '146 discloses a method for producing a surface seeded particulate concrete surface (16), to include spreading a particulate such as glass and seashells, but does not disclose the use of sand. However, Shaw et al., '635 discloses a similar method of forming surface seeded particulate concrete, to include spreading glass bead, or seashells, or sand, such as fine/silica sand or Monterey Aquarium/coarse sand, as the particulate being spread. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the method of forming a concrete surface of Shaw et al. '146 with the step of spreading coarse sand on a concrete surface, as taught by Shaw et al. '635 in order to reduce the cost of forming the surface, by utilizing common sand. See Shaw et al. '635 col. 2, lns. 27-67.

4. Claims 12, 14, 33, 34, 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw et al. # 6,033,146 in view of Olson # 3,815,824.

Shaw et al. '146 discloses a method for producing a surface seeded particulate concrete surface (16), to include spreading a particulate such as glass, seashells, and composite

mixtures, in a manual fashion, but does not disclose the use of a material gun. However Olson teaches it is known to mix at least two constituent materials before spreading said composite mixture onto a concrete surface, the spreading device (16) having a hopper (18) and a material spreading gun (40). Although neither Shaw et al., nor Olson disclose spreading the particulate material a distance of at least twenty feet, Shaw et al. and Olson both disclose spreading the particulate, uniformly, onto a concrete surface, for use as a roadway or other continuous concrete paving; obviously 2 lane roadways are typically more than 10 feet wide per lane. Further, Olson teaches the spreading gun can be powered by a hydraulic or electric motor, or a gasoline engine, in order to spread the material uniformly over a width of a roadway. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the method of surface seeding a concrete surface, of Shaw et all., with the step of providing a machine mounted sand spreading device, as taught by Olson, in order to form a homogonous composite material before spreading onto a concrete surface. See Col. 3.

Response to Arguments

5. Applicant's argument's with respect to Application # 10/058,812 are moot with respect to the instant application # 10/653,146.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Addie whose telephone number is (571) 272-6986.

The examiner can normally be reached on Monday-Saturday from 7:00 am to 2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (571) 272-6998.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Raymond Addie
Patent Examiner
Group 3600

RWA
6/21/2005